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BODY SUBSTANCE PRECAUTIONS

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BODY SUBSTANCE PRECAUTIONS

Body Substance Precautions System

For many years, "isolation" has been viewed as the cornerstone to a health care facility's infection prevention and control program.

Traditional isolation practices that focus on diagnosed cases of infectious diseases provide an incomplete strategy for infection prevention and control. These practices can cause detrimental psychosocial effects in residents and their families and interfere with the home-like atmosphere that nurses try to establish.

For these reasons, a system called Body Substance Precautions (BSP), was developed. It focuses on keeping all moist body substances, (blood, feces, urine, wound drainage, tissues, oral secretions, and other body fluids) from the hands of personnel. This is accomplished primarily through handwashing and increased glove use. The system eliminates many of the ritualistic practices associated with traditional isolation systems while increasing the use of barriers for all contacts with body substances. The BSP system described in this section is a practical, safe approach that fits well with the extended care environment.

Although not identical with Standard Precautions, as recommended by the Centers for Disease Control and Prevention, or Universal Precautions, as recommended by both the American Hospital Association and the Occupational Safety and Health Administration, BSP is consistent with both. BSP goes a step further and considers **ALL** moist body fluids as potentially contagious, regardless of the resident's diagnosis.¹⁻¹⁰ In order to follow these recommendations, the decision to use barrier precautions must focus on the care provider's routine **INTERACTIONS** with the resident. In the past, the resident's **DIAGNOSIS** had been the cornerstone of traditional isolation systems.

The major reason for changing from a traditional "diagnosis-driven" isolation system to the "interaction-driven" BSP is that **clinically diagnosed infectious diseases represent only the tip of the iceberg**. Many infectious organisms are carried without symptoms. This is certainly true for bloodborne pathogens such as human immunodeficiency virus (HIV) infection, hepatitis B virus (HBV) and hepatitis C (HCV) infection. Therefore, focusing isolation precautions only on diagnosed cases of AIDS, hepatitis B and C misses the vast majority of persons who have the infectious agents in their blood. Similarly, virulent or antibiotic resistant strains of bacteria such as methicillin resistant *Staphylococcus aureus* (MRSA), vancomycin resistant enterococci (VRE) or gram-negative bacteria may colonize body orifices or moist body surfaces without symptoms. These organisms can easily be transmitted from resident to resident on the hands of personnel. Because medical history and physical examination cannot reliably identify all persons infected with these or other infectious diseases, it makes far more sense to treat **ALL** moist body substances as potentially infectious rather than to focus precautions only on the residents that are diagnosed

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with infectious diseases. The BSP system reduces the risks of such transmissions by the consistent use of barriers whenever contacts with any body substances are likely.

BSP provides a consistent approach to managing body substances from **ALL** residents and is essential in preventing transmission of potentially infectious agents.

The appropriate barrier to be used is selected after careful consideration of each specific situation for the overall reasonable exposure risk associated with the task. **Risk factors that should be included in the evaluation include:**

- Type of body fluid with which there is or will be contact.
- Volume of blood/body substances likely to be encountered
- Reasonable anticipation of exposure; e.g., "will my hands touch the resident's secretions?"
- Probable route of exposure; i.e., hand contact, airborne, droplet, splashing
- Microbe concentration in fluid or tissue.

Many resident care procedures dictate the use of specific barriers for the resident's protection (i.e., sterile gloves for dressing changes). However, when personal protective equipment is selected for protection of the caregiver, professional judgment may determine when barriers are needed. These personal standards should be based on the individual employee's skills and likely interactions with the resident's body substances, non-intact skin, and mucous membranes and not conflict with facility policies/procedures. The risk factors outlined above should be used to assist in the decision-making process.

In addition to BSP, residents with suspected or diagnosed diseases that are transmitted through an airborne route are placed on **Stop Sign Alert** in a private room equipped with negative air pressure and 6-12 air exchanges per hour. (When these conditions cannot be met, the resident with a suspected or confirmed airborne disease will be transferred to another institution according to the transfer policy.)

Since traditional garb such as gowns and facemasks were never designed to prevent transmission of viral infections such as chickenpox or measles a STOP sign is placed on the door to alert personnel and visitors to "Check with the nurse before entering." The nurse can then instruct personnel or visitors as to the precautions required and/or deny entrance to the room due to their susceptibility for acquiring the disease (no immunity). For airborne diseases to which immunity does not develop such as tuberculosis, the nurse will direct those entering the room to don appropriate respiratory protection.

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BODY SUBSTANCE PRECAUTIONS

Implementing the Body Substance Precautions System

Implementing the Body Substance Precautions system includes the following elements and should be followed by **ALL** personnel at all times regardless of the resident's diagnosis.

Gloves

Wear gloves when it can be reasonably anticipated that hands will be in contact with mucous membranes, non-intact skin, any moist body substances (blood, urine, feces, wound drainage, oral secretions, sputum, vomitus, or items/surfaces soiled with these substances) and/or persons with a rash. **Federal OSHA laws require that gloves must be worn when performing vascular access procedures.** (Gloves are not required for intramuscular injections or allergy injections unless contact with blood is anticipated.) **Gloves must be changed between residents and between contacts with different body sites of the same resident.** If the glove is torn or a needle stick or other injury occurs, the glove should be removed, discarded in the trash and a new glove used promptly as resident safety permits.

REMEMBER: Gloves are not a cure-all. They should reduce the likelihood of contaminating the hands, but gloves cannot prevent penetrating injuries due to needles or sharp objects. Dirty gloves are worse than dirty hands because microorganisms adhere to the surface of a glove easier than to the skin on your hands. Handling medical equipment and devices with contaminated gloves is not acceptable.

Always select the type of glove that is appropriate for the task being performed. **Non-powdered gloves are preferred as they decrease the risks for acquiring a latex allergy.** The following general guidelines are recommended:

1. Use sterile gloves for procedures involving contact with normally sterile areas of the body.
2. Use examination gloves for procedures involving contact with mucous membranes (unless sterile gloves are indicated) and for other resident care or diagnostic procedures that do not require the use of sterile gloves.
3. Gloves are to be worn for vascular access procedures or drawing blood.
4. Change gloves between contacts (as defined above) with different residents or with different body sites of the same resident.
5. Do not wash or disinfect surgical or examination gloves for reuse. Washing with surfactants may cause "wicking," i.e., the enhanced penetration of liquids through undetected holes in the glove. Disinfecting agents may cause glove deterioration.

INFECTION CONTROL GUIDELINES FOR LONG TERM CARE FACILITIES

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6. Use general-purpose utility gloves (e.g., rubber household gloves) for housekeeping or plant engineering chores involving potential blood contact and for instrument cleaning and decontamination procedures. Utility gloves may be decontaminated and reused but should be discarded if they are peeling, cracked, or discolored; or if they have punctures, tears, or other evidence of deterioration.
7. If two pairs of gloves are worn, one on top of the other, both pairs are considered contaminated after use and **both** pairs must be changed.
8. Medium sized non-powdered gloves should be placed in each resident room. Other sizes should be available in a treatment room or supply closet. If gloves are creating an allergic response, hypoallergenic gloves or glove liners must be made available.
9. Use hand lotions to protect skin; however, petroleum-based hand lotions such as Vaseline will cause latex to deteriorate.
10. Be alert to and report signs and symptoms of latex sensitivity (e.g.: dry, itchy, irritated areas on hands; rash that begins 24-48 hours after contact to latex; immediate skin redness; hives or itching; and/or respiratory symptoms from runny nose to difficulty breathing).

Handwashing

Handwashing remains the single most effective means of preventing disease transmission. Wash hands often and well, paying particular attention to around and under fingernails and between the fingers. **Wash hands whenever they are soiled with body substances, before food preparation, before eating, after using the toilet, before performing invasive procedures and when each resident's care is completed.**

Proper handwashing technique includes these steps:

1. Use a sink with warm running water, soap, and paper towels.
2. Push sleeves up above wrists (some recommend removing jewelry and wristwatch).
3. Apply soap to the hands and wash the hands vigorously using plenty of lather and friction for 10 or more seconds; interlace fingers and rub palms and the back of the hands in a circular motion; clean between fingers and vigorously clean the fingertips and nail beds.
4. Rinse hands and wrists thoroughly, keeping hands down and elbows up.
5. Dry hands thoroughly from the fingers down to the forearms and wrists with a paper towel; if available, use clean paper towel to turn off the water.

The use of antiseptic handwashing soaps are recommended during outbreaks, following gross contamination, prior to performing invasive procedures and prior to caring for high risk individuals; e.g., immunocompromised. Waterless antiseptic hand cleaners or towelettes may be used if hands cannot be washed right after soiling, but soap and water must be used as soon as feasible. The use of alcohol based rinses or foams with a non-drying emollient are occasionally used as an adjunct to handwashing.

Face and Eye Protection

Wear masks and/or eye protection when it is likely that eyes and/or mucous membranes will be splashed with body substances, (e.g., when suctioning a resident with copious secretions, emptying fluids, irrigating a wound). These items should be available and accessible for personnel when needed. After use, either discard disposable masks/eye shields in the resident's room or place reusable goggles or face shields in a specified container in the utility room until they can be washed with soap and water.

Apron or Gown

Protect clothing with a plastic apron or gown when it is likely that clothing will be soiled with body substances. These items are primarily designed to reduce the soiling of the clothing of personnel with moist body substances. They should be worn any time soiling of clothes is anticipated. They should be removed and discarded after completion of each resident contact task. Lab coats when soiled with blood or body fluids should be removed as soon as feasible and placed in the facility laundry for cleaning.

Sharps Handling and Disposal

1. Contaminated needles must never be recapped by hand. When available, needle recapping, resheathing or removal devices should be used. In their absence, a one-handed "scoop" technique must be used.
2. Contaminated needles must never be removed from syringes by hand. If it is necessary to remove a needle from a syringe, use a hemostat or other device.
3. Needles must never be bent, broken or sheared by hand.
4. Broken glass and sharps (including disposable razors) that are contaminated must never be picked up by hand. Tongs or a brush and dustpan must be utilized for this purpose.

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5. All sharps must be disposed of in a closable, puncture-resistant container that is red or labeled with a biohazard symbol. It must be leakproof on the sides and bottom, and kept upright throughout use and disposal. It must be replaced routinely and not be allowed to be overfilled. The container must be easily accessible to staff (ideally at the point of use WITHOUT any manipulation of the syringe) and located as close as feasible to the immediate area of use. Prior to removing a sharps container, it must be securely closed to prevent spillage or protrusion of contents during handling, storage, transport or shipping.

Employee Health

Health care workers with skin problems such as open lesions or weeping skin rash must refrain from all direct resident care and from handling resident-care equipment until cleared by the facility administrator or his/her designee. These conditions put the employee and the resident at risk of infection.

Division of Aging rules (13 CSR 15-14.042 and 13 CSR 15-15.042) regulate exposure of residents to staff with communicable diseases. (See Appendix C)

Handling Laboratory Specimens

All specimens for the laboratory should be in leakproof containers that are recognizable as holding specimens only. If the outside of the container is contaminated, the specimen and container should be discarded and another sample obtained. When this is not possible, the specimen container should be placed in a leakproof, biohazard labeled or red bag/red container for handling, processing, storage and transport.

If the specimen is leaving the facility for any reason, it must have a biohazard label or be in a red bag/red container.

Consistent with the need to treat all blood and body substances as if they are potentially infectious, **DO NOT** place "MRSA", "VRE", "blood precautions", "AIDS", or other infection labels on specimens from residents with identified infections. Using 'special precautions' labels on specimen tubes and containers encourages a false sense of security and potentially increases risk to personnel who may handle unlabeled specimens less carefully than they should. However, it is always important to write the resident's diagnosis on laboratory requests, x-ray requests, pathology requests, etc., because the diagnosis has clinical relevance. If trays are used to transport specimens in the facility, they must be labeled with the biohazard symbol. Also, always follow laboratory instructions for complete specimen labeling regarding resident's name, age, room, type specimen, how specimen collected, date of collection, facility and other requested information. This information is extremely important to laboratories as it contributes to the quality of laboratory reports.

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For information on specimen collection, see Section 4. Collection and Transport of Laboratory Specimens.

Soiled Linen

Laundry workers, whose job entails sorting or handling contaminated linens, should wear gloves and other protective apparel as appropriate to prevent linens coming into contact with skin and clothes. No special procedures are needed for laundry from persons known to be infected. Therefore, if linen is processed within the facility, it need not be labeled except to identify all used linen as contaminated. If a commercial laundry that does not utilize Universal Precautions processes linen, then the transportable containers must either be red or have a biohazard label.

Guidelines for appropriate management of soiled linen include:

- Place all soiled linens in laundry bags provided at the point of use.
- Avoid contact with your uniform/clothing and surrounding patient care equipment.
- Do not shake or place linen directly on the floor.
- For linens lightly to moderately moist, fold and/or roll in such a way as to contain the moist area in the center of the soiled linen.
- For soiled linens that are **saturated** with moisture, place them in a plastic bag followed by tying or knotting the open end. The plastic bag containing wet linens should then be placed in an approved laundry bag and closed before transporting to the proper designated area.
- **DO NOT OVERFILL BAGS** more than 2/3 of capacity as overfilled bags tend to rupture if they are dropped.

Disposal of Regulated Waste From Resident's Rooms

According to OSHA, regulated waste is defined as:

- Liquid or semi-liquid blood or other potentially infectious materials (OPIM);
- Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed;
- Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling;
- Contaminated sharps; and
- Pathological and microbiological wastes containing blood or OPIM.

All trash generated from individual resident's rooms, with the exception of fluid-filled containers and regulated waste as above, can be disposed of in regular trash bags as per usual practice.

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Fluid-Filled Containers

All fluid-filled containers (e.g. suction canisters and hemovacs) may be emptied directly into a hopper or toilet. Personnel should wear protective attire (gloves, goggles) to protect themselves from splashes unless a protective mechanical barrier (splash shield) is provided.

If fluid-filled containers are disposed of without emptying, follow the regulated waste handling procedures of the facility. These procedures must utilize closable containers that are leak proof and are either red or biohazard labeled. If the outside of the container becomes contaminated, the regulated waste must be placed in a second labeled or red container before being transported by a licensed infectious waste hauler. Alternatively, a facility can decontaminate all regulated waste in accordance with Department of Natural Resources (see Appendix F) and Department of Health (see Appendix G) rules.¹¹⁻¹³

Wound Dressings

All wound dressings are to be disposed of in a manner so as to "confine and contain" any blood/body fluids that may be present:

1. Small dressings can be enclosed in the disposable glove used to remove the dressing. Pull the glove off inside out containing the dressing inside of it. This dressing and the gloves can then be discarded into the regular trash container in the resident's room.
2. Larger dressings should be removed using gloved hands and placed into a leakproof bag. Small plastic bags are available as a "dressing change bag" that can be used at the bedside. This bag can be used for the old dressing, gloves, and other trash from the dressing change procedure. This bag can generally be deposited into the regular trash container in the resident's room unless saturated with blood or as defined above as a regulated waste.

Environmental Cleaning

Proper cleaning of the environment is an essential component of the entire spectrum for preventing and controlling infections. Detailed procedures, schedules and training must be in place for daily cleaning in all resident areas in order to reduce bacterial load (quantity of bacteria). Routine cleaning should be done with a disinfectant or disinfectant/detergent registered with the Environmental Protection Agency (EPA), the evidence of which is an EPA number on the product label. Cleaning agents and disinfectants must be appropriate for the type of soilage and the surface or equipment to be decontaminated.

All equipment, protective coverings on equipment, environmental surfaces, working surfaces (countertops, etc.), bins, pails, cans and similar receptacles must be regularly observed for contamination with blood or other potentially infectious materials (OPIM). If such

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contamination is known to have occurred, then prompt cleaning and decontamination must be carried out.

Low level disinfectants with or without combined detergents should remove or kill most bacteria within 10 minutes contact time. Low level disinfectants are appropriate for noncritical items; i.e., those that come into contact with intact skin such as bedpans, crutches, bed rails, bedside tables, floors and furniture. Such disinfectants are iodophors, phenolics, quaternary ammonium compounds (QUATS) diluted per manufacturer's recommendations and sodium hypochlorite (bleach solution) diluted to 100 ppm (1/4 oz./gallon water).

Good housekeeping practices begin with fresh cleaning cloths, fresh cleaning or mopping solutions, and clean buckets and mop heads on a daily basis. Solution should be changed frequently throughout the day, but particularly if solution becomes gray (possibly every 3 rooms).

Cleaning should always start with the cleanest part of the room (top areas) and proceeds to the dirtiest-bottom, floor areas and then the commode or toilet area. Always clean grossly soiled areas (feces, urine, vomitus, sputum, and drainage) with an organic cleaner/detergent before using the disinfectant. Mop heads should be bagged and laundered at the end of the day or when grossly soiled.

For blood or OPIM spills, first absorb most of the bloody spill using a gel agent or paper towels. Next, clean area with disposable towels while wearing gloves. **(Disinfectants will not work in the presence of organic matter.)** Then apply an EPA-registered disinfectant labeled as effective against HIV and hepatitis B virus (HBV) such as Iodophors, phenolics, "Quats"^{14,15}, according to the manufacturers recommendations for disinfection or use 500–800 ppm (1:100, 1:65) sodium hypochlorite (1.3 oz. or 2 oz. per gallon of water). If sodium hypochlorite is used for large blood or OPIM spills, use 5000 ppm (1:10; 13 oz./gallon of water) let stand for 10 minutes. (Mixed sodium hypochlorite is only stable for 24 hours.) After cleaning and disinfection, carefully discard rags into a plastic bag.¹⁶

Cardiopulmonary Resuscitation (CPR)

To minimize the need for mouth-to-mouth resuscitation, resuscitation devices (mouthpieces, pocket masks, and resuscitation bags) should be located in designated areas within the facility. No transmission of hepatitis B virus (HBV) or human immunodeficiency virus (HIV) via mouth-to-mouth resuscitation has been documented. However, because of the risk of salivary transmission of other infectious diseases (e.g., *herpes simplex* and *Neisseria meningitidis*) and the theoretical risk of HIV and HBV transmission during artificial ventilation of residents, resuscitation devices should be used. Disposable resuscitation equipment and devices should be used once and disposed of or, if reusable, thoroughly cleaned and disinfected after each use following manufacturer's guidelines.

Resident Placement, Activity Restriction and the Use of Private Rooms for Infection Prevention and Control

The physician and persons responsible for infection control should assess individual residents as to the potential for transmitting infectious organisms. Room assignments and restriction of activities are determined by this assessment. Although there are many reasons for using private rooms, the major reasons are diseases transmitted in whole or in part by the airborne route or by the resident who extensively soils the environment with body substances.

Private rooms are generally indicated for residents with uncontrollable excretions (diarrhea), secretions, excessive coughing, heavy wound drainage or widespread skin disease. Residents should be confined to their rooms while the above conditions exist. If no private rooms are available, the resident could be placed in a semi-private room with **a resident considered at low risk for developing an infection**, such as one who is:

- ambulatory
- well-nourished and hydrated
- able to take care of daily needs
- not needing invasive lines or tubes
- not immunocompromised by disease or drugs

Residents considered **at higher risk for colonization** with a specific pathogen (including multiply-resistant organisms) and subsequent infection are those who:

- have had multiple courses of antibiotics or prolonged antibiotic therapy
- are on dialysis (hemo or peritoneal) or have renal failure
- are immunocompromised, on long-term steroids or chemotherapy
- have an open wound, surgical or non-surgical; e.g., pressure ulcers
- have an invasive site; e.g., I.V., gastrostomy, foley, tracheostomy

If a multiply resistant organism has been identified by culture as colonizing or infecting a resident, he/she should share a room with another resident having the same organism, preferably with the same antibiogram. If a resident is not available with the same organism, the roommate should be a resident who is considered at low risk for colonization and subsequent infection with that organism, as mentioned above.

Activities

Coherent residents, **colonized** or **infected** with a specific pathogen, may participate in nursing home activities and may eat in the dining hall. Since there are both recognized and unrecognized pathogen carriers participating in nursing home activities, **all** residents should be considered colonized and should have wounds or invasive sites cleansed, covered, and have hands washed before leaving their rooms. Conversely, residents may have minor or chronic infections, which pose no risk to others within the bounds of ordinary social settings and acceptable behavior. Allowances should be made, where there is no means of

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transmitting the organism to others, to allow these residents to engage in certain activities; i.e., a resident who is continent or has an indwelling catheter and has a urinary tract infection or a resident who has a scant amount of drainage on a wound that is covered with a clean secure dressing. Each resident should be assessed individually prior to restricting activities.

Physician's Role in Implementing the Body Substance Precautions System

1. It is not necessary to write an order for "isolation precautions" in the resident's chart.
2. If the resident has a disease which is transmitted in whole or in part by the airborne route (See Subsection 3.3 Diseases Transmitted by Airborne Route) this information should be written on the **ORDER SHEET** so the nurse can place a **STOP SIGN ALERT** (See Figure 3.1-1) on the resident's door.
3. Each physician needs to evaluate his/her own interactions with the resident and use barriers as appropriate, based on anticipated contact with body substances, not the resident's diagnosis of infection.
4. All physicians should know their own chickenpox, measles and rubella immune status. Those who perform invasive procedures are advised to know their HIV antibody status and their hepatitis B antigen status as advised by 19 CSR 20-26.050 and 19 CSR 20-26.060 (See Appendix H). Participation in a tuberculosis screening program and vaccination against the current influenza viruses is recommended.
5. All physicians who have frequent contact with blood or body fluids should be immunized against Hepatitis B.
6. The use of private rooms for infection prevention and control.

There are many reasons for requesting private rooms as a medical necessity. However, the major infection prevention and control reasons for a private room are when the resident has a disease that is transmitted in whole or in part by the airborne route or when the resident extensively soils the environment with body substances. Examples include any resident with uncontrollable excretions, excessive coughing, secretions or heavy wound drainage. This resident should be segregated from other residents and confined to his/her room during the period in which the above condition(s) exist. If no private rooms are available, the resident could be placed in a semi-private room with a low-risk resident. The physician and infection control practitioner should individually assess each resident.

Role of Nurses and Other Health Care Workers in Implementing the Body Substance Precautions System

1. Each health care worker needs to evaluate his/her own interactions with the resident and use barriers as appropriate, based on anticipated contact with body substances, not the resident's diagnosis of infection. Use the guidelines described in BSP to make these judgments.
2. If the resident has a disease which is transmitted in whole or in part by the airborne route, the nurse is responsible for assuring the appropriateness and safety of persons wishing to enter the resident's room. Use the guidelines described in Precautions for Residents with Airborne Diseases in this section to make these judgments.
3. All health care workers should know their own chickenpox, measles, mumps and rubella immune status. Participation in a tuberculosis screening program and vaccination against the current influenza viruses is recommended.
4. All health care workers who are reasonably expected to have contact with blood or body fluids will be offered hepatitis B vaccination.^{10,17}

Precautions for Residents With Airborne Diseases

Some diseases are transmitted through an airborne route and require precautions beyond the routine Body Substance Precautions. Airborne diseases are transmitted on tiny particles in the air. Fortunately, there are few airborne diseases seen in the United States (measles, TB, chickenpox and disseminated herpes zoster). There are basically two types of airborne diseases:

1. Those that people develop immunity to after vaccination or exposure and
2. Those to which you do not develop immunity after exposure.

All residents infected with an airborne disease must be placed in a private room that receives 6-12 air exchanges per hour and is under negative air pressure. In the past, masks, gowns and gloves were used to prevent persons from being exposed to residents with chickenpox, measles etc. Unfortunately, these devices do not protect health care workers from these diseases as evidenced by health care workers (HCWs) acquiring infection even when wearing these items. For this reason, the immunological history of the HCW is important. Instead of relying on ineffective barriers to prevent transmission, it makes far more sense to assign only personnel who have documented immunity to measles and chickenpox to care for these residents. For diseases that do not elicit immunity, such as tuberculosis, special respiratory protective masks (N-95 masks) must be worn to provide adequate protection.

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When a diagnosis is not definitive, all health care workers should wear masks to prevent inadvertent exposure.

Precautions

- Private room with negative air pressure and 6-12 air exchanges per hour.
- "Stop Sign Alert" on door (See Figure 3.1-1)
- Door closed

Stop Sign Alert

When a patient is suspected of or known to have a disease transmitted in whole or in part by the airborne route, the physician needs to request a private room and write "**STOP SIGN ALERT**" with the diagnosis or "rule out" diagnosis on the order sheet. This will prompt the nurse to place a "**Stop Sign Alert**" (see Figure 3.1-1) on the door to the patient's room. **The Stop Sign Alert instructs anyone about to enter the room to "check with the nurse before entering."**

IMPORTANT: The "Stop Sign Alert" sign is only to be used for residents with airborne diseases as listed in Subsection 3.3 Diseases Transmitted by Airborne Route. The facility should instruct all staff to recognize this sign and to follow the appropriate respiratory precautions.

Nurse Responsibilities

1. **Placing a "Stop Sign" on the patient's door.**
2. **Assigning a patient to a private room equipped with special ventilation (negative air pressure).**

Since the diseases listed in Subsection 3.3 Diseases Transmitted by Airborne Route are transmitted in whole or in part by the airborne route, the **door should remain closed at all times**. In rooms where special ventilation is not available, fans may be appropriate for placement in the window. Fans must face outward (toward the outside) to create negative air pressure. The facility must evaluate the appropriateness of using a portable fan versus transferring the resident to a higher level of care.

3. **Instructing persons wishing to enter the room to EITHER:**

- a) Wear a mask

Example: For a patient with active tuberculosis or any of the other airborne diseases listed in Subsection 3.3 Diseases Transmitted by Airborne Route which are marked with an asterisk (*), all persons entering these rooms shall be instructed to wear a mask.

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- b) Enter or **not** enter the room based on their immune status

Some diseases confer lifelong immunity such as measles and chickenpox, (diseases marked with a double asterisk [**] in Subsection 3.3 Diseases Transmitted by Airborne Route). For these cases, the nurse is responsible for determining the immune status of the person who wishes to enter the room.

Example: If the patient has chickenpox or measles, persons entering the room who have not been vaccinated or do not have a history of having the disease should not enter the room because masks do not guarantee protection against these viral infections. If there is a history of chickenpox and/or measles or documentation of vaccination, the person may enter the room without a mask.

Transportation of the Patient With an Airborne Disease

Residents with diseases transmitted by an airborne route should not be transported unnecessarily to other departments. If these residents must be transported, they should wear a mask, and for diseases marked with a “***” in Subsection 3.3 Diseases Transmitted by Airborne Route, the transporter should be immune to the disease. (The receiving department should be notified in advance so that immune personnel can be assigned to perform the procedure). Although masks are generally not helpful when care givers wear them to protect themselves from airborne viruses, placing surgical masks on the patient with an airborne disease will minimize the droplets that may be shed into the air when coughing, laughing, sneezing, etc. Therefore, masks should be placed on any patient with an airborne disease when transporting to another department within the facility.

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Figure 3.2-1



**SEE THE NURSE
BEFORE ENTERING**

BODY SUBSTANCE PRECAUTIONS

Diseases Transmitted by Airborne Route

The following diseases are transmitted in whole or in part by the airborne route. Residents with these diseases need to be assigned to private rooms equipped with special ventilation, (negative air pressure), and have a "STOP SIGN ALERT" posted on the door. The door should remain closed at all times. In rooms where special ventilation is not available, fans can be placed in the window facing out to create negative pressure.

Diseases	How Long to Apply Airborne Precautions	Comments
** Chickenpox (Varicella)	Until all lesions are crusted.	Persons who are not susceptible do not need to wear a mask. Exposed susceptible residents should be isolated beginning on the 8th day after first exposure until 21 days after the last exposure.
** Disseminated Shingles (Herpes Zoster or localized Herpes Zoster in immunocompromised resident)	Duration of illness.	Localized lesions in immunocompromised residents frequently become disseminated. Use the same precautions as for disseminated disease.
* Tuberculosis (TB)-pulmonary; confirmed or suspected.	In most instances, duration can be guided by clinical response and a reduction in numbers of TB organisms on sputum smear. Usually this occurs within 2-3 weeks after chemotherapy is begun. When the resident is likely to be infected with INH-resistant organisms, apply precautions until resident is improving and sputum smear is negative for TB organisms.	Prompt use of multiple effective anti-tuberculosis drugs is the most effective means of limiting transmission. Residents should be taught to cover nose and mouth with several layers of tissues when coughing or sneezing. A mask must cover the resident's nose and mouth when out of the room for any reason.
Rubeola (Hard Measles)	Until 4 days after appearance of rash	Communicability is minimal after second day of rash. Vaccine virus is not communicable. Persons not susceptible do not need to wear a mask. Search for and immunize exposed susceptibles (within 72 hours of exposure) or give IG (within 6 days of exposure).
<p>*Wear a mask with a minimal designation as N-95.</p> <p>**All persons who are not immune to these diseases should not enter the rooms of these residents.</p>		

NOTE: Suspected or diagnosed *Mycobacterium tuberculosis* infection is a reportable Category I disease, which must be reported to the Department of Health within 24 hours as required by 19 CSR 20-20.020. See Appendix I for complete copy of 19 CSR 20-20.020 that lists all reportable diseases.

The facility shall also report to the Division of Aging when a resident is diagnosed as having a communicable disease as required by 13 CSR 15-14.042(78) and 13 CSR 15-15.042(34). See Appendix C. for relevant portions of those rules.

INFECTION CONTROL GUIDELINES FOR LONG TERM CARE FACILITIES

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BODY SUBSTANCE PRECAUTIONS

Examples of Situations Using the Body Substance Precautions System

Because the BSP system is a judgment and skill-based system, each individual makes his/her own decisions about when to wear gloves and use other barriers based on their own skill and their interaction with the resident's body substances, non-intact skin or mucous membranes. Facilities also establish policies and procedures for when staff must use barrier precautions. Here are some examples of typical situations:

Caring for Incontinent Residents

Gloves should be worn routinely for cleaning incontinent residents and for helping residents with toileting activities. It is difficult to clean an incontinent resident without getting urine and/or stool on the hands. The major risk when performing this task is getting stool underneath the fingernails. Gloves reduce this risk and make handwashing after completing the task easier and more efficient. A plastic apron may be needed for cleaning incontinent residents and changing the bed. Always obtain the plastic apron **BEFORE** the tasks are begun.

Emptying Urinary Catheter Bags

When a care provider is emptying a urinary catheter bag, this should be viewed as a single interaction to a single resident. The task for one resident should be completed before going to the next resident. Gloves should be worn to empty catheter bags as it is difficult not to get urine on the hands. Gloves must be changed and hands washed between residents. It is unacceptable to consider it a single task to empty the catheter bags for several residents in sequence without changing gloves and washing hands between residents. This is because of the real risk of transmitting organisms from the catheter bag drainage spout of one resident to the next resident's drainage spout via the hands of personnel. Each resident should have his/her own labeled individual graduate container for draining the catheter bag. This prevents a resident's catheter bag drainage spout from becoming contaminated with organisms from other residents' urine as when a common graduate or emptying container is used for all persons with indwelling urinary catheters.

When a Resident Has a Rash or Skin Lesions

When a resident has a rash on his/her body or skin lesions, it could be due to any number of causes. A critical index of suspicion is essential to determine whether the rash is varicella (chickenpox or zoster), herpes simplex, scabies, syphilis, impetigo, a drug reaction, or due to any number of other conditions. The most important intervention for rashes or skin lesions is use of appropriate protective barrier precautions (e.g.: gloves and possibly gown) followed by

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describing the rash to the resident's physician so appropriate testing can be performed and/or a diagnosis be obtained. In many cases, prompt recognition of the rash, identification of the cause, and prompt appropriate intervention can prevent transmission to the care provider and others. Gloves and gown should be worn when caring for persons with a rash caused by a communicable condition.

Suctioning Residents

With the BSP system, each facility staff member needs to evaluate his/her suctioning practices. Eye protection and masks should be used only if splashing is likely to occur. Most persons who suction residents frequently have learned how to position their heads so that they are not splashed. Suctioning of a resident's airway should **ALWAYS** be done with the care provider wearing gloves on both hands. In addition, if a care provider puts hands into a resident's mouth for **ANY** reason, (e.g., for examination or when doing mouth care), gloves should be worn followed by handwashing after glove removal.

Starting Intravenous Therapy Infusions or Drawing Blood

A person starting intravenous therapy, drawing blood, or performing fingersticks should wear gloves. The major risk in starting IV's and drawing blood is a needle stick injury. When starting and discontinuing IV therapy, it is the discontinuing that is the lesser of the controlled procedures and has the greater potential for blood exposure. Careful needle handling is the most important factor in this interaction. Generally, needles should not be recapped, and never bent, or broken by hand, but should be discarded directly into the needle disposal containers. The "one-handed recapping technique" should be used in situations where recapping is necessary. Needle-recapping devices should be used when recapping is necessary.

Manipulating Stopcocks

A person who manipulates stopcocks on a regular basis often gets blood on his/her hands during such manipulations. If getting blood on the hands is the usual experience for the individual, gloves should be worn for manipulating stopcocks. It is wise to develop a standard practice of wearing gloves to manipulate stopcocks and lines because it is difficult to do so without getting blood on the hands.